

Arcam Model 882, 884, 886, 888 Loudspeakers

Instructions for use

Introduction

Thank you for buying Arcam loudspeakers. These loudspeakers have been designed to produce a high standard of sound reproduction at an affordable price. Although suitable for use with any good quality hi-fi equipment, the speakers are an excellent sonic and physical match for the rest of the Arcam range of hi-fi electronics.

Installation Instructions

Positioning

For optimum results these speakers should be positioned 15 to 40cms from a rear wall and at least 60cms (2 feet) from any side wall.

The final sound will of course depend on the acoustics of the listening room, and experimentation with speaker positioning and furnishings is definitely worthwhile. As a starting point we suggest that the speakers should be placed 2.4-3m (8-10 feet) apart with their backs 10cms (4 inches) from the rear wall. The bass output may then be raised or lowered by moving the speakers closer to or further away from the wall. Toeing-in the speakers, so that their axes cross just in front of the listener may also be beneficial to treble balance and stereo imagery.

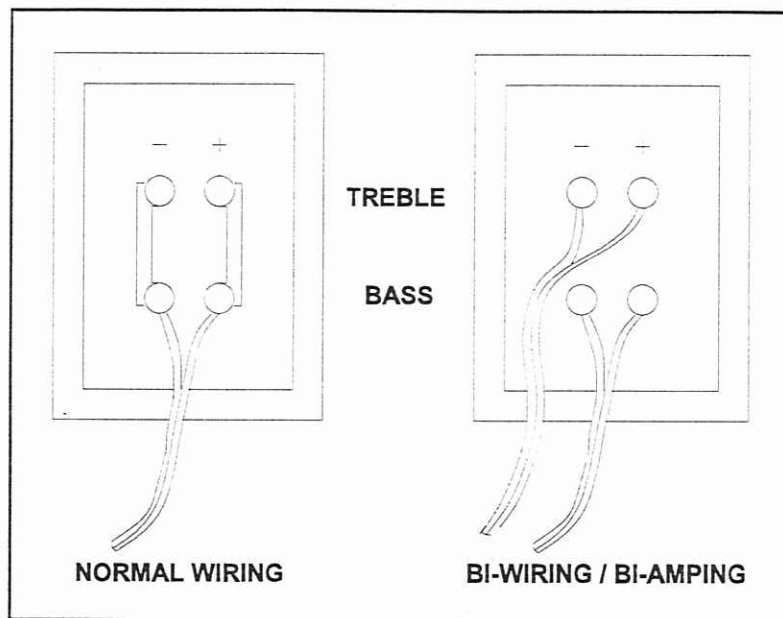
The more rigidly a speaker is held, the better it will sound. On floor standing models (886, 888) we recommend fitting the threaded spikes provided into the loudspeaker base. For best performance, the smaller 882, 884 models should be used on stands wherever possible. Use rigid metal stands of 30-60cms (12-24 inches) height. Properly damped types that do not "ring" when tapped with a pencil, either by virtue of construction, or by filling with dry silver sand, will bring out the best in the loudspeaker.

It is also possible to obtain a good sound balance when shelf mounting. The rear of the loudspeakers should be no less than 5cm from the wall to allow free flow of air from the reflex port and it should be mounted at least 4cm from a corner and 60cm from the floor (these distances may be interchanged if more convenient).

Speaker Cables

The speakers should be connected to the amplifier using good quality, high purity copper cables with a cross sectional area of at least 1mm² per conductor. Solid core cables or those with surface only conductors are particularly suitable. Bell wire and very cheap or giveaway speaker cables should be avoided - they are a false economy and can badly degrade the sound quality. Neither do we recommend the use of fat, heavily stranded cables, as these often impart a harsh and hashy sound to the system.

The cable runs to the two speakers should be of roughly equal length and yet as short as practicable (a long run of speaker cable always sounds worse than a short one). The usual care should be taken over speaker phasing. Both loudspeakers should be connected to the amplifier with the same phase (black to black and red to red). All speaker cables will be colour coded or have some physical identification (such as a small "rib" along one wire) to aid correct phasing.



Bi-wiring

Bi-wiring loudspeakers is a cost effective way of improving the sound quality of hi-fi system. The bi-wiring principle involves electrically isolating the treble and bass sections of the loudspeaker's crossover network and bringing out the connections to the four terminals on the loudspeaker. The use of separate cables to each half of the crossover then enables the complete isolation of the signals fed from the amplifier to the treble and bass speaker units. A reduction in low level intermodulation and crosstalk effects is achieved, resulting in a cleaner sound with improved imaging and separation of instruments.

To bi-wire a loudspeaker you must remove the two links between the pairs of red and black terminals on the rear of the speaker and then connect two separate cable runs to the bass and treble inputs. These cables should then be connected together at the amplifier's output terminals. This may be done by connecting both cables into a single pair of 4mm plugs or by making common bare wire or spade connections to the terminals.

Bi-amping

Bi-amping is a similar principle to bi-wiring, except that two stereo amplifiers are used to drive the loudspeakers instead of one. To bi-amp, connect the treble units to one of the amplifier's outputs, and the bass units to the other amplifier. Both amplifiers must be fed from a common stereo signal and must be of equal gain. Arcam models such as the Delta 290 and Delta 290P are ideal for this application. Bi-amping offers a further improvement over bi-wiring, as separate amplifiers are dedicated to treble and bass frequency bands, with less internal intermodulation effects occurring in each amplifier.

You must remove the links on the rear of the loudspeakers for bi-amping, otherwise you will damage your amplifiers. Care must also be taken to ensure that all individual loudspeaker units are connected in the same phase (i.e. connect terminals RED to RED and BLACK to BLACK). If this is not done serious frequency response deviations will result.

Power Handling

Arcam loudspeakers are designed to reproduce recorded music under normal domestic conditions. We do not recommend nor warrant them for use in any form of sound reinforcement application or at discothèques, parties or other forms of speaker demolition contest.

Bearing this in mind the loudspeaker will perform well and safely with hi-fi amplifiers rated at between approximately 40 and 150 watts per channel. However care must always be taken to avoid amplifier overload or "clipping". If you hear distortion from the loudspeakers, then reduce the volume level at once, as this is a clear sign of overload. Apart from possible damage to the amplifier this can and does damage loudspeakers. In this respect, an overdriven low powered amplifier is much more likely to cause damage than a properly used high powered one.

SPECIFICATION

Model No.	882	884	886	888
Frequency range	50Hz-22kHz	45Hz-22kHz	40Hz-22kHz	40Hz-22kHz
Drive unit system	2 way	3 way	2 way	3 way
Sensitivity 1W at 1m	88dB	88dB	88dB	88dB
Nominal Impedance	6ohms	6ohms	6ohms	6ohms
Compatible amplifier	40-120W	40-150W	40-150W	40-200W
Weight each	5.9kg	8kg	11.2kg	13.7kg
Height (mm)	381	557	841	966
Width (mm)	216	216	216	216
Depth (mm)	247	247	267	299